Before the

United States Department of Commerce National Telecommunications and Information Administration Washington, D.C. 20554

United States Department of Agriculture Rural Utilities Service Washington, D.C. 20250

In the Matter of)	
)	Docket No. 1540414365-5365-01
Broadband Opportunity Council)	RIN 0660-XC019
Notice and Request for Comment)	

COMMENTS OF CONNECTED NATION, INC.

Connected Nation, Inc., a nationwide non-profit, is happy to provide this input in response to the Broadband Opportunity Council's Notice and Request for Comment. For over ten years, Connected Nation has been working with communities and states with the purpose of increasing broadband access, adoption, and use. In the course of its programs, Connected Nation has worked in hundreds of communities, helped thousands of local, public and private stakeholders establish broadband technology actions plans, validated broadband availability and adoption in nine states and the Commonwealth of Puerto Rico, trained tens of thousands of individuals in digital literacy skills, trained and placed hundreds of unemployed and at-risk individuals in jobs only possible with digital technology, and delivered thousands of computers to disadvantaged youth. Connected Nation is committed to bringing broadband-enabled resources and experience in digital inclusion initiatives to all Americans, and has pioneered the paradigm shift of thinking about community broadband challenges solely as a challenge of access and connectivity to a multi-faceted challenge that impacts the transformative adoption and

use of broadband as an elemental component of modern education, employment, and community prosperity.

With this background, Connected Nation is pleased that the Broadband Opportunity

Council's request for comment includes questions that relate not only to the challenge of

broadband access, but also to the adoption and use of broadband technology. Connected Nation's

experience in local communities has shown us that while the barriers to broadband access,

adoption, and use share some commonalities, dissimilar communities and demographic groups

encounter and respond to these barriers differently.

Through its work that pre-dated Recovery Act funding for state broadband initiatives, and after that funding, its work as a grantee or contractor for ten State Broadband Initiative grants, Connected Nation has worked directly with hundreds of communities – educating them on the broadband gaps that their communities face, evaluating their progress through an assessment process, and helping them build solutions. Connected Nation has had success with a *data-driven* approach that fosters *collaboration* between community, state, and industry. Connected Nation believes that to truly understand a community's needs and develop solutions, timely and accurate information on the availability, adoption, and use of broadband is crucial.

Connected Nation's recommendations to the Broadband Opportunity Council build off of that data-driven, collaborative, and community-based experience. Connected Nation offers four general sets of recommendations that are tied to various questions made in the Council's Notice

¹ For information on Connected Nation's Connected Community Engagement program, which has engaged over 320 communities in 7 states, organized and energized over 2,600 community team volunteers, and delivered 116 data-informed local broadband and technology community plans, *see http://www.connectmycommunity.org/*. The Connected program was originally funded through the NTIA State Broadband Initiative grant program, and the volume of engagements surpassed grant requirements. Due to this strong demand for community engagement and planning, since the end of that grant program earlier this year, the Connected program is continuing, with state and local funding, in several states.

and Request for Comment. Further detail on these recommendations (including corresponding questions in the Request for Comment) is provided below.

First, Connected Nation recommends that, in consultation with states and local governments, the Council recommend and establish a specific and common set of broadband targets for residential, business, middle mile, and anchor institution access and adoption. Federal agency efforts to expand broadband access and adoption should be measured by the federal government along with these targets. While agencies might use different connectivity levels for different purposes (or be required to by statute), having one set of broadband targets upon which the federal agency progress can be tracked will prove beneficial in providing focus and documenting outcomes. A common set of targets will also be helpful in organizing and inspiring communities to undertake their own initiative.

Second, the Council should recommend that the federal government, in consultation with state and local governments, use these targets to identify and establish Broadband Opportunity Zones in areas that do not meet those targets. Discussed more fully below, establishing Broadband Opportunity Zones will facilitate *proactive* federal policy responses to broadband access and adoption challenges. For example, while progress has been made in some components of federal land management and rights-of-way policies since the National Broadband Plan Infrastructure recommendations in 2010² and the President's Executive Order on Accelerating Broadband Infrastructure in 2012, 3 by and large management of federal land, buildings, and rights-of-way remains largely *reactive* – a mindset of ensuring that federal asset management be responsive to industry requests for permits in areas in which broadband firms wish to build. A

² Federal Communications Commission, *Connecting America: The National Broadband Plan*, at Chapter 6 (Infrastructure) (2010) (National Broadband Plan).

³ Executive Order 13616, Accelerating Broadband Infrastructure Deployment. 77 Fed. Reg. 36903 (June 20, 2012).

proactive policy response would work to affirmatively make and market changes to land use, permitting timelines, leases, and projects in areas of need where broadband providers to date have not sought to build. Broadband Opportunity Zones should be established in consultation with state and local governments, which may have their own broadband infrastructure and economic development initiatives for those regions.

Third, the Department of Commerce should seek to fund state and local broadband planning, capacity building, and technical assistance projects, as required by the Broadband Data Improvement Act of 2008 (BDIA).⁴ The BDIA provides a Congressionally-authorized framework for collecting comprehensive data on broadband adoption and use, organizing and engaging state and local community teams, building public-private partnerships to develop solutions, and assisting states and communities in developing broadband plans and strategies. Failure to fund the BDIA has created a significant gap in knowledge, engagement, and technical assistance that will affirmatively make the Council's efforts to expand broadband access and adoption more difficult, less efficient, and less effective. In addition to using the BDIA to fund state and local technical assistance, planning, and capacity-building efforts, the Council should establish a deadline of December 31, 2015, for the FCC to fully implement its stewardship of the National Broadband Map, including making independently validated data available to the public. If the FCC misses that deadline, the Department of Commerce should reassert its statutory responsibility for funding broadband data collection and validation that the BDIA requires.

Fourth, Connected Nation recommends that the concepts of broadband adoption and access targets, Broadband Opportunity Zones, and planning and technical assistance be incorporated into a number of already-existing federal grant programs. Specific

⁴ Pub. L. No. 110-385, 122 Stat. 4097 (codified at 47 U.S.C. §§ 1301-04).

recommendations to ten specific federal programs are provided in the Attachment. These programs represent the federal funding programs that have been identified in Connected Nation's work with over 320 community technology planning teams in seven states as having the potential to help a community solve a particular broadband access or adoption challenge.

I. In consultation with state and local governments, the Council should establish a common set of targets for residential, business, middle mile, and community anchor institution broadband access and adoption. Federal agencies should use these targets in focusing initiatives and tracking progress.

(Questions 2, 5, 8, 14, 20, 27, 28, 30; Inter-Agency Action)

Covering twenty-five federal agencies, the scope of the Broadband Opportunity Council is vast.

No matter how laudable the goal, there is the potential that each of these agencies, pursuing their own statutory mandates and objectives, will diverge in their focus and ongoing efforts, thus leaving broadband as an afterthought. Achieving the goals of the Presidential Memorandum⁵ will require a great deal of inter-agency coordination and tracking. To facilitate that task, Connected Nation recommends that the Council establish a set of broadband availability and adoption targets to which federal agency progress will be measured.

Currently, there are a number of different – and sometimes conflicting – goals for broadband access and adoption in use by the federal government. Sometimes different approaches to "broadband" are dictated by statute (such as the Farm Bill's definition of 4 Mbps down/1 Mbps up for rural areas). But simply because certain programs might be tied to statutorily established outcomes does not mean that the Administration cannot pursue a common set of broadband access and adoption goals for performance management.

⁵ Memorandum for the Heads of Executive Departments and Agencies, *Expanding Broadband Deployment and Adoption by Addressing Regulatory Barriers and Encouraging Investment and Training*, March 23, 2015, available at https://www.whitehouse.gov/the-press-office/2015/03/23/presidential-memorandum-expanding-broadband-deployment-and-adoption-addr.

In setting these targets, it is important to recognize that different users will require different levels of speed and network quality. While there is a temptation to define "broadband" by reference to a single metric such as download speed, it is evident that the connectivity needed for a residential user varies considerably from the connectivity needs of an elementary school, a factory floor, a farm, or a hospital. The FCC has already begun this evolution in thinking with regard to its E-rate and Connect America Fund programs, and the rest of the federal government should follow suit.

Connected Nation recommends that the Council establish a set of common broadband availability, adoption, and speed targets for the following categories of users:

Consumer and Business	Community Anchor Institutions
Access and Adoption	Access and Adoption
Residential Consumers	K-12 Schools
Small Businesses	Public Libraries
Medium and Large Enterprises	Community Colleges
	Colleges and Universities
	Healthcare facilities
Infrastructure Access	State and local government facilities
Access to Middle Mile Facilities	Community Centers
	Public safety facilities

The Council should establish **specific** broadband access, quality, and adoption goals for **each** of these categories. These targets should be established after consultation with state, local, and Tribal governments. Federal agencies would then be expected to report on the progress that their programs have made with regard to each of these targets on a regular basis, and the Council should report the progress annually.

A common set of broadband adoption and availability targets will also help incentivize and inspire community-based planning activities and solutions. Connected Nation's Connected Community Engagement program gives communities assessments on thirteen measures of

broadband access, adoption, and use, many of which are based on National Broadband Plan goals and FCC targets. There is a tremendous value is using these targets to educate community leaders and other stakeholders with regard to "where they stand" in relation to federal targets. Having a comprehensive set of broadband access and adoption targets also can quickly drive local communities to identify problems of which many might not even have been aware (such as the broadband capacity the local library's connection) and provide common goals. As a result, a clear and comprehensive set of targets would help state and local efforts to promote broadband access and adoption.

Obtaining reliable and timely data to track this progress will be important. While there are some existing sources of data collection that could collect and track some of these targets, no comprehensive single source exists, and many existing data sources are insufficient. For example,

• While the FCC, through Form 477, collects broadband availability and subscription data, it lumps all residential, businesses and institutional purchasers into one category of "end users;" only collects the top download speed available in a census block to any "end user;" does not report out broadband subscriptions by type of "end user;" does not independently validate the data; and does not release it with any granularity that can be of use to solution-oriented community projects.

⁶ The Connected assessment program uses community teams to gather data on these thirteen metrics, which include infrastructure inventories, data on adoption, information on the presence and capacity of digital literacy programs in the community, and the use of broadband services by local governments, healthcare, and other economic sectors in the community. The assessment tracks this data against national benchmarks and awards points based on a community's progress, and that assessment is used to write a Community Technology Action Plan. When a community has enough points in each of the Access, Adoption, and Use categories, it is recognized as a Certified Connected Community. To date, the assessment has helped over 116 communities write Technology Action Plans, and 52 communities have received Certified Connected recognition. For more information, *see* http://www.connectednation.org/sites/default/files/connectednation/files/cnctd_fall_final.pdf (Progress Report).

⁷ For example, Connected Nation's subsidiary, Connect Alaska, recently completed the Alaska School Broadband Audit, a comprehensive research project that collected and, through on-site visits, validated broadband access and connectivity data from every K-12 school district in Alaska. This project was inspired by the FCC's actions in 2014 to establish specific broadband capacity targets for K-12 school broadband and WAN connections in the E-rate program. Tracking and assessing the progress of Alaska schools in meeting these new federal benchmarks was an important motivating factor for the Audit. For more information, including district-by-district assessments, a final report, and a data visualization tool that allows the user to see where any individual school in Alaska compares to these national benchmarks, state averages, or their peers, *see* http://www.connectak.org/school-broadband-audit.

- The National Center for Education Statistics annual Digest of Education Statistics⁸ is a very comprehensive and valuable report on education institutions from Kindergarten through graduate school – but it contains very little information on broadband Internet and computer use in schools, with some of the most recent data on Internet access being from 2008.⁹
- The Institute of Museum and Library Services conducts an annual *Public Libraries in the* United States Survey of public libraries that includes data on Internet computers used by the general public and the number of public use sessions of those devices. ¹⁰ However, the survey does not include data on broadband connectivity and in-building capacity (such as Wi-Fi) at public libraries.

Connected Nation believes that each of these data collection levers should be improved to help identify areas in need of intervention and to track progress. In particular, as discussed more fully below in Section III, Connected Nation also believes that full funding of the state broadband initiative program entrusted to the Department of Commerce by the Broadband Data Improvement Act of 2008 would go a long way to bridging these data gaps.

II. The Council, in consultation with state, local, and Tribal governments, should establish Broadband Opportunity Zones in identified areas of need. Federal agencies should be directed to give priority to broadband-related projects or initiatives in Broadband Opportunity Zones.

(Questions 1, 2, 5, 11, 12, 13, 14, 15, 21, 22, 24, 26, 30; Inter-Agency Action)

Connected Nation recommends that the federal agencies use the comprehensive and common set of broadband targets to identify and define particular areas of need as "Broadband Opportunity Zones." Designation of an area as Broadband Opportunity Zones would trigger prioritization in federal funding opportunities that relate to broadband and also would provide a focus point for federal agencies to develop programs (such as expedited permitting or additional technical assistance) that are targeted in such a Zone.

⁸ For the most recent edition released in May 2015, see https://nces.ed.gov/pubsearch/index.asp?HasSearched=1&searchcat2=subjectindex&L1=108&L2=0.

¹⁰ For the most recent release, see http://www.imls.gov/research/public_libraries_in_the_united_states_survey.aspx.

The concept of a Broadband Opportunity Zone could be an effective method of communicating the broadband needs of a specific community to a wide and diverse number of federal agencies and programs, well beyond those that work on broadband issues every day. The simple fact is that most of the agencies involved in the Broadband Opportunity Council, while their mandate encompasses broadband in part, cannot fully and completely be aware of specific areas of broadband needs on a daily basis. Identifying Broadband Opportunity Zones and using that concept to guide federal agency action will help federal agencies "get on the same page" with regard to the needs of a particular region, allow for targeted interventions, and better coordinate and focus federal agency activities and investments.

For example, suppose that data identifies that a particular area – such as Puerto Rico – has a low broadband adoption rate and is lacking in sufficient broadband infrastructure. ¹¹ In such a Broadband Opportunity Zone,

- Federal agencies responsible for building, land, and asset management could establish "fast track" permitting processes or even pre-clear certain corridors in that Zone for prospective rights-of-way uses;
- Preference points or scoring for federal grants, such as IMLS National Leadership Grant applications for technology and learner spaces in public libraries, or Department of Transportation TIGER competitive grants, could be given preference in the Broadband Opportunity Zone;
- Federal funding for state highway and other infrastructure projects could automatically require specific provisions for open trenching and telecommunications conduit installation; and
- Federal grant programs, such as the Distance Learning and Telemedicine grant program that currently limit grant funds for training, planning, or technical assistance could be

¹¹ Indeed, Connected Nation's subsidiary, Connect Puerto Rico, collected adoption data in Puerto Rico, which shows that home broadband adoption among adults is only 46% and there are municipalities in which broadband availability of speeds of 3 Mbps down/768 kbps up is less than 50%. This data helped inspire the Puerto Rico's aggressive Gigabit Island Strategic Plan, released earlier this year. *See The Gigabit Island Plan: Puerto Rico Broadband Strategic Assessment* (Feb. 2015), available at: http://www.connectpr.org/sites/default/files/connected-nation/pr_gigabit_plan_020915 final.pdf.

modified to allow such uses of grant funds, or could relax matching fund requirements for projects in the Broadband Opportunity Zone.

The value of this construct would be in targeting broadband-impacting actions by a multitude of federal agencies without needing to have every federal program or grant manager become an expert in broadband or even be intimately aware of the nature of the community's need.

Designation of a project as occurring inside a Broadband Opportunity Zone by an expert agency like the Council or the NTIA would trigger these preferences and requirements automatically.

Implementation of a Broadband Opportunity Zone project in a specific agency could look similar to the U.S. Department of Agriculture's Food Desert program. ¹² A "food desert" is an area identified and established by USDA as having a lack of access to affordable and nutritious food. USDA gives grant priorities to fund technical assistance projects that are designated to be "food desert projects," and can include funding for specific food retail, production, and distribution projects located in "food deserts."

Importantly, establishing Broadband Opportunity Zones will create *proactive* federal policy responses to broadband access and adoption challenges, instead of relying on *reactive* approaches. For example, simply improving the application process for federal land permitting or rights-of-way access will only benefit areas in which a service provider wishes to build. While those barriers should certainly be reduced, lowering the barriers will only do so much – because many areas of the country are "broadband deserts" where service providers have not sought to invest in such locations. In particularly troubling locations, government needs to move beyond policies that improve permit request response times to one in which government is actively promoting and seeking investment in broadband investment.

¹² For USDA Food Desert program information, see www.usda.gov/fooddeserts.

Broadband Opportunity Zones should be designated through consultation with state, local, and Tribal governments, as Zone designation might be particularly important for state and local economic development initiatives specific to an area. Connected Nation's experience in working with communities facing broadband challenges nationwide is that *proactive* policy responses and solutions are more likely to be successful. In the course of engaging dozens of community leaders in our Connected program, projects and initiatives that help "connect the dots" and make various stakeholders – including providers – aware of the entire picture of the challenges a community faces builds connections and begins to generate solutions. Oftentimes, community leaders benefit by having a focus point for their efforts, and we believe that identifying Broadband Opportunity Zones and attaching *proactive* policy responses to that designation would be an effective way of building local, community energy for effective broadband access and adoption projects.

Broadband Opportunity Zones also should be coordinated with the \$10 billion in Connect America Fund broadband network subsidy investments that the FCC has offered qualifying carriers this year. The FCC has published a list of census blocks identifying eligible areas for subsidy. The list of Connect America Fund eligible areas can serve as a starting point for identifying Broadband Opportunity Zone projects that will prioritize broadband adoption, technical assistance, and community anchor institution connectivity improvements.

¹³ Federal Communications Commission, Wireine Competition Bureau, Public Notice, DA 15-509, WC Docket No. 10-90 (rel. Apr. 29, 2015), available at: https://www.fcc.gov/document/model-based-support-offers-pn. As part of Phase II of the Connect America Fund, price cap carriers have been offered a total of over \$10 billion from 2015-2020 (\$1.675 billion per year for six years) to upgrade and maintain fixed broadband and voice networks serving over 4 million identified locations in rural America. Those providers have until August 27, 2015, to decide whether to accept or reject that offer on a state-by-state basis. The FCC is also working on Connect America Fund subsidy model for smaller, rural, rate-of-return carriers.

III. The Department of Commerce should seek to fund state and local broadband planning, capacity building, and technical assistance projects, as required by the Broadband Data Improvement Act of 2008 (BDIA). The Council should establish a deadline of December 31, 2015, for the FCC to fully implement its stewardship of the National Broadband Map, including comprehensive data collection, data validation, and public access to underlying data, which is necessary for state and local broadband planning activities.

(Questions Nos. 5, 7, 14, 16, 19, 21, 27, 28, 29; Department of Commerce)

Connected Nation strongly believes that effective broadband community engagement and broadband solutions depend upon having access to robust, accurate, and publicly available data on the status of broadband access and adoption in that community. In creating the Broadband Opportunity Council, President Obama said that the Council should "pay particular attention to opportunities to promote broadband adoption and competition through "...accurately measuring real-time broadband availability and speeds." The Request for Comment includes several questions, noted above, about the accuracy of broadband availability and adoption data and seeks methods to improve that data and assistance for broadband planning, technical assistance, and adoption programs.

In 2008, Congress recognized the value of data and its importance in broadband planning and solutions, when it passed the Broadband Data Improvement Act of 2008 (BDIA). The BDIA, co-sponsored by then-Sen. Barack Obama, was passed unanimously by the 110th Congress, and provides a robust, flexible framework for collecting and validating broadband availability and adoption data and for the use of that data by state, local, and regional broadband planning teams. By providing for competitive grants to states for technical assistance, broadband

¹⁴ Presidential Memorandum, *supra* note 5.

¹⁵ Pub. L. 110-385, 122 Stat. 4102, codified at 47 U.S.C. 1301, et seq.

planning, public-private partnerships, and data collection, the BDIA lays the foundation for informed community action on broadband access and adoption challenges.

The BDIA vests responsibility for that program with the U.S. Department of Commerce. However, in recent years the Department of Commerce has abdicated this responsibility and the Administration has not sought funding for this program, even in light of the obvious relationship this program has with many of the areas that the Broadband Opportunity Council seeks input and proposals.

In particular, Section 106 of the BDIA states that the Department of Commerce "shall award grants . . . for the development and implementation of statewide initiatives to identify and track the availability and adoption of broadband services within each State," and that those grants "shall be used":

- (1) to provide a baseline assessment of broadband service deployment in each State;
- (2) to identify and track —(A) areas in each State that have low levels of broadband service deployment; (B) the rate at which residential and business users adopt broadband service and other related information technology services; and (C) possible suppliers of such services;
- (3) to identify barriers to the adoption by individuals and businesses of broadband service and related information technology services, including whether or not--(A) the demand for such services is absent; and (B) the supply for such services is capable of meeting the demand for such services;
- (4) to identify the speeds of broadband connections made available to individuals and businesses within the State, and, at a minimum, to rely on the data rate benchmarks for broadband service utilized by the Commission to reflect different speed tiers, to promote greater consistency of data among the States;
- (5) to create and facilitate in each county or designated region in a State a local technology planning team--(A) with members representing a cross section of the community, including representatives of business, telecommunications labor organizations, K-12 education, health care, libraries, higher education, community-based

organizations, local government, tourism, parks and recreation, and agriculture; and (B) which shall--

- (i) benchmark technology use across relevant community sectors;
- (ii) set goals for improved technology use within each sector; and
- (iii) develop a tactical business plan for achieving its goals, with specific recommendations for online application development and demand creation;
- (6) to work collaboratively with broadband service providers and information technology companies to encourage deployment and use, especially in unserved areas and areas in which broadband penetration is significantly below the national average, through the use of local demand aggregation, mapping analysis, and the creation of market intelligence to improve the business case for providers to deploy;
- (7) to establish programs to improve computer ownership and Internet access for unserved areas and areas in which broadband penetration is significantly below the national average;
- (8) to collect and analyze detailed market data concerning the use and demand for broadband service and related information technology services;
- (9) to facilitate information exchange regarding the use and demand for broadband services between public and private sectors; and
- (10) to create within each State a geographic inventory map of broadband service, including the data rate benchmarks for broadband service utilized by the Commission to reflect different speed tiers, which shall--(A) identify gaps in such service through a method of geographic information system mapping of service availability based on the geographic boundaries of where service is available or unavailable among residential or business customers; and (B) provide a baseline assessment of statewide broadband deployment in terms of households with high-speed availability.

This very long list of actions and responsibilities specifically designed to bridge federal and state data collection and broadband gaps. And they are precisely the tasks that from 2009

until earlier this year, the Department of Commerce worked to bridge jointly with states through the State Broadband Initiative grant program.¹⁶

The American Recovery and Reinvestment Act of 2009 included \$350 million in funding for Broadband Data Improvement Act grants, only a few months after the BDIA was signed into law. ¹⁷ For five years, state governments and nonprofits, including Connected Nation, have used those grants to research, collect, and validate broadband availability, and to use that data in providing state, local, and regional broadband planning. The data collection effort culminated in the National Broadband Map, www.broadbandmap.gov, which has traced the progress of wireless and wireline growth in the United States.

In addition to informing Department of Commerce and FCC broadband programs, the National Broadband Map has been used by many other federal and state agencies and the public. Entities as diverse as the Federal Geographic Data Committee, the Homeland Infrastructure Foundation-Level Data (HIFLD) Working Group, and the National States Geographic Information Council, Broadband Mapping Working Group, have used the Map for reports and analyses. The Wilson Center has used the Map as a case study for open policy innovation. ¹⁸ Just as importantly, that data has been used by Connected Nation and state grantees to develop local community broadband and technology plans, write and focus state broadband plans, ¹⁹ and to construct public-private partnerships that solve broadband gaps.

 $^{{\}color{blue}^{16}}\,\underline{\text{http://www.ntia.doc.gov/category/state-broadband-initiative.}}$

¹⁷ Those first grants were for five years and have recently ended. Despite its obligation in the BDIA to administer this program, in subsequent budget requests, the Department of Commerce has not sought funding for any further broadband planning, technical assistance, research, and data collection and validation grants to states.

 ¹⁸ Bastian, Zachary and Byrne, Michael, Wilson Center, *The National Broadband Map: A Case Study on Open Innovation for National Policy*, available at http://www.scribd.com/doc/109998799/The-National-Broadband-MapA-Case-Study-on-Open-Innovation-for-National-Policy.
 19 Working with Connected Nation, several states have written data-driven broadband plans through this program, including the

¹⁹ Working with Connected Nation, several states have written data-driven broadband plans through this program, including the Nevada State Broadband Action Plan, http://www.connectnv.org/broadband-plan, the Puerto Rico Gigabit Island Plan, http://www.connectpr.org/gigabit-island-plan?lang=en, and the ongoing work of the Minnesota Governor's Task Force on Broadband, http://mm.gov/deed/programs-services/broadband/task-force/.

However, although BDIA vested responsibility for broadband mapping, research, and state and local community broadband engagement with the Department of Commerce and state designated entities, the Administration has not sought further funding for this program, despite its obvious relevance and value to the task of the Broadband Opportunity Council. Moreover, efforts by the FCC to take over the data collection and mapping components of the BDIA program appear to be stalled.

Nearly two years ago, in June 2013, the FCC changed its rules to begin to collect broadband availability data twice a year, and it was announced that in doing so, the FCC would be assuming responsibility for maintaining and updating the National Broadband Map. ²⁰ Since that announcement nearly two years ago, however, that complete transfer still has not occurred, as the Map has not been updated with FCC-collected Form 477 data – the data currently on the Map is the data collected by NTIA and state grantees. The FCC has not stated what level of detail in broadband availability data will be released to the public going forward, what form any online presence for the Map will remain, whether API for underlying data will be released as has been the case under the NTIA, and whether or how the FCC will independently validate collected data.

Moreover, the data the FCC is collecting through its revised Form 477 process is of substantially lower quality than the data collected by states and the NTIA pursuant to the BDIA. In particular, the FCC data collection will

- (a) Not include middle mile data;
- (b) Not include data on connectivity and subscription data for community anchor institutions;

²⁰ Federal Communications Commission, *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Report and Order, 28 FCC Rcd. 9887 (2013).

- (c) Not include multiple speed tiers and instead will only collect data on the highest speed tier available to any particular "end user" in a census block. An "end user" includes any purchaser (from a residential consumer to a large business enterprise), so the full scope of availability of service options available to residential and small businesses is likely to be obscured by this reporting;
- (d) Not include granular road segment availability information for larger, more-rural census blocks as BDIA grantees collected.

The data that has been collected and is now available at broadbandmap.gov has been tremendously valuable to state and community broadband planning efforts – but those gains are at risk of being lost in the future if the FCC does not make available a credible and comprehensive alternative to the National Broadband Map. Already, the data on display is nearly one year old, so tracking progress with regard to Gigabit connectivity in cities and to community anchor institutions, or wireless broadband expansion in rural areas, will soon become difficult, if not impossible to assess and study if the map is not updated soon and the underlying Form 477 data not made available.

The Broadband Opportunity Council should recognize that the Administration, through the Department of Commerce, is ultimately responsible for the data collection and broadband planning efforts required by the BDIA. The Council should give the FCC a deadline to update the map and make data available to the public as well as state and local planning initiatives by December 31, 2015. If the FCC does not take this action, the Department of Commerce should develop a plan to reassert ownership of the National Broadband Map, including seeking funding to collect and validate updated data.

The Department of Commerce's responsibilities under the BDIA are not limited to infrastructure mapping. Even if the Department of Commerce allows the FCC to administer the mapping responsibility, the BDIA also provides a framework for federal funding of state and

local broadband planning activities described above. The Council should recommend that the Department of Commerce begin to fund state and local planning initiatives through BDIA grants, as it did from 2009 through 2014.

IV. Broadband adoption and access initiatives should be incorporated into a number of already-existing federal grant programs

(Question Nos. 1, 2, 5, 7, 11, 13, 16, 20, 21, 22, 24; Multiple Agencies (Attachment))

Current federal grant programs overwhelmingly seek to fund tangible infrastructure projects that aim to better the economic development, businesses, and residents of a community. The problem with these grants, however, is that often the steps needed to research and make educated and informed action is left out creating an apparent exclusion of broadband community engagement and planning activities. With a goal of funding these infrastructure and development projects, oftentimes the necessary planning and research required to identify a community's needs is a necessary first step to successful project implementation. In fact, the best way to generate long-term support for funded infrastructure is through active community planning and promotion of broadband adoption and use programs among citizens and businesses.

In the Attachment to these Comments, Connected Nation identifies a series of federal grants that would benefit from improved language allowing for planning, community engagement, and a focus on adoption and use of broadband. To the extent that these programs are discretionary, competitive grant programs, these programs could also support Broadband Opportunity Zones, by prioritizing grant applications that would impact those Zones. In other instances, allowing for greater flexibility in the grant program to include funding for technical assistance, planning, and training would also facilitate broadband adoption and use in many

disadvantaged communities. Programs focusing on business innovation could also be an opportunity to prioritize broadband-enabled businesses in areas where business broadband adoption and access are deficient.

The programs listed in the Attachment are not a comprehensive survey but instead represent a list of federal programs that Connected Nation has identified in the course of its engagement with hundreds of communities as having the potential to support broadband initiatives, but which contain substantial barriers to realizing that potential. These programs are a few examples of how federal agencies can alter their funding opportunities to allow for and encourage informed action by communities looking to harness the opportunities granted to them through increased funding.

* * *

The Broadband Opportunity Council report and recommendations can provide the energy and initiative to spark fundamental changes in the federal government's approach to broadband access and adoption. In 2010, the Recovery Act and the National Broadband Plan provided such a spark, and those developments led to the creation and transformation of programs at the Federal Communications Commission, the USDA Rural Utilities Service, the NTIA, and other Executive Branch agencies. The challenge of the Broadband Opportunity Council now is to expand the reach of this initiative to the twenty-five member agencies who, working in consultation with state, local, and Tribal governments, have at their disposal many levers that can positively impact broadband access and demand in communities in need.

Connected Nation, based on its experience in working directly with communities, local governments, and states on broadband community engagements, data research, network availability validation, and state broadband plans, recommends that the Council take advantage

of this opportunity and focus its efforts on specific, tangible, and data-driven results and programs.

Creating a common series of broadband access and adoption targets – spanning not only residential service but also businesses and community anchor institutions like libraries and schools – will provide a collective goal for federal agencies to modify their programs that impact broadband and to track and monitor progress that results from those programs.

To aid in this process, Connected Nation proposes that the federal government establish "Broadband Opportunity Zones" in areas that do not meet these targets. Special, proactive government activities, such as accelerated right-of-way permitting processes, dig once and open trenching requirements, and priority for competitive federal grants, should be given to projects that lie within those Zones. In working directly with communities, Connected Nation has learned that providing a focal point for community action — which designation as a Broadband Opportunity Zone could provide — is an important method of organizing stakeholders, mobilizing communities, and developing tangible, specific action plans. Communities, local and state governments, and the industry will respond when given the targets, the data to measure their progress, and the tools to respond to their broadband challenges.

Respectfully submitted,

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Attachment to Connected Nation Broadband Opportunity Council Comments Federal Programs That Could Impact Broadband Access and Adoption

June 10, 2015

Link	http://w ww.rd.us	rograms-	rural-	develop	ment-																			
Recommended Changes	Target program to broadband areas of need (Broadband Opportunity Zones).	Specifically include broadband access and adoption	talgets for both Einer place and Opportunity Blants.	include digital skills training for businesses and communities among possible uses of the funds.	Modify selection criteria to include broadband access	and adoption. Currently, selections are primarily made	based on economic need and evidence of job creation	among local businesses. This will enable projects such	as planning and assistance for training, distance	learning, technology-based economic development,	and long-term technology planning.													
Current Grant Program Uses	Enterprise type grant funds must be used on projects to benefit small	areas such as:	Acquisition or development of	land, easements, or rights-of- way	Pollution control and abatement Canitalization of revenue and abatement	funds	 Distance adult learning for job 	training and advancement	 Rural transportation 	improvement	 Community economic 	development	 Technology-based economic 	development	 Feasibility studies and business 	plans	 Leadership and entrepreneur 	training	 Rural business incubators 	 Long-term business strategic 	planning	Opportunity-type grant funding	must be used for projects in rural	areas, and they can be used for:
Applicant	Towns, Communities,	Authorities,	Corporations,	Institutions of Higher Education,	Federally recognized Tribes.	and Rural	Cooperatives are	eligible to apply.																
Objective and Eligible Areas	To support targeted technical assistance, training and other	activities leading to the	expansion of small and	emerging private businesses in rural areas	that have fewer than 50	\$1 million in gross	revenues.	-	Eligible areas include	rural areas or towns	outside the urbanized	periphery of any city	FO OOO or more	30,000 01 11101 6										
Program	Rural Business Development Grants (RRDG)	- represents	merging of	RBUG ana RBEG grants																				

	http://www.rurdeev.usda.gov/utp_commcon_nect.htm_l	http://www.rurd ww.rurd ev.usda.g ov/utp d It.html
	Target program to broadband areas of need (Broadband Opportunity Zones). Provide for planning of projects including site selection and broadband demand aggregation. Support community outreach and awareness of new services and infrastructure and do not primarily focus on facilities.	Target program to broadband areas of need (Broadband Opportunity Zones), particularly where anchor institution access and adoption targets are not met. Allow for applicant to select mix of equipment/training/planning use of grant funds. Currently 90% of grant must be spent on equipment; only 10% can be spent on training staff on how to use equipment. Result is that program only benefits
 Community economic development Technology-based economic development Feasibility studies and business plans Leadership and entrepreneur training Rural business incubators Long-term business strategic planning 	Funds may be used to build broadband infrastructure and establish a community center which offers free public access to broadband for two years.	Equipment for classrooms: cameras, video monitors, computers, and LAN. Also for physician consultation, radiology, ex-ray scanners, and digital microscopes.
	Incorporated Organizations, Indian Tribes, or Tribal Organizations, as defined in 25 U.S.C. 450b(b) and (c). State or local units of government, or Cooperative, private corporations or limited liability companies, organized on a for- profit or not-for- profit basis.	Incorporated entities, including municipal corporations, on a for-profit or not- for-profit basis, that operate rural schools, libraries, healthcare clinics and other
	To construct, acquire, or lease facilities to deploy broadband to community facilities such as schools and public safety buildings, as well as residents and businesses in the community. Eligible areas include a single community with a population less than 20,000 which does not have Broadband Transmission Service.	Development and deployment of advanced telecommunication services throughout rural America to improve education and healthcare. Eligible areas include rural areas with
	Connect	Distance Learning and Telemedicine (DLT) Program direct loans and grants

	http://www.rurdev.usda.gev.usda.gov/had-rcdi_grants.html	http://www.rd.us da.gov/p rograms- services/ communi tv- facilities- direct- loan- grant- program
applicants that have already assessed their needs and already have sufficient funds for training (and not necessarily those in areas of greatest need). Provide for planning or investigation regarding which technology to select for use. Funds are likely to flow only to communities that are already prepared and ready for purchase; does not offer a helping hand to communities that do not know where to start.	Establish specific broadband deliverables and outcomes – selection criteria are tied generally to "capacity development" of the recipient. Allows for funding to be used for software and computers, but does not take into account broadband access for an area; potentially will result in areas with inadequate service being unable to take full advantage of the program. Target program to broadband areas of need (Broadband Opportunity Zone).	Target program to broadband areas of need (Broadband Opportunity Zone). Broadband connectivity and construction not specifically included in grants. It is quite possible that a community facility that has no broadband access could be funded through this grant program, even though construction is the most cost-effective time to install broadband.
	Recipient provides technical assistance to organizations serving qualified rural areas.	Build facilities and purchase equipment for fire and rescue, early warning systems, police stations, health clinics, schools, libraries, hospitals, etc.
organizations that operate educational or healthcare facilities.	Public or private organizations, including recognized tribes, which have been organized at least 3 years and have experience working with eligible recipients.	Public bodies, non- profit organizations, and recognized Tribes. USDA Approved Lenders may apply for loan- guarantees on behalf of the above entities.
populations of 20,000 or less.	Assists organizations that provide technical assistance to other organizations to improve their ability to undertake housing, and community or economic development projects in rural areas. Eligible areas include rural areas, cities and towns with population not exceeding 50,000 including urbanized areas.	Provide essential community facilities for rural communities. Faith-based and community organizations and First Responders are encouraged to apply. Eligible areas include rural areas, cities, and towns with populations
	Rural Community Development Initiative (RCDI) Grants, also includes Rural Jobs and Innovation Accelerator Challenge through EDA	Community Facilities Direct Loan and Grant Program

	http://w ww.rd.us da.gov/p rograms- services/ rural- economi c- develop ment- loan- grant- program	ww.rurd ev.usda.g ov/bcp_r cdg.html
	Target program to broadband areas of need (Broadband Opportunity Zone), particularly in areas where business broadband access and adoption are lagging. Specifically include broadband-focused and digital-technology projects for priority. Include specific broadband adoption and use deliverables in program goals. There is no specific broadband deliverable other than mention of general technical assistance to rural businesses or residents and telecomm services for medical, education, and job training services. Specifically include digital skills training for businesses and communities among possible uses of the funds.	Target program to broadband areas of need (Broadband Opportunity Zone), particularly in areas where business broadband access and adoption are lagging. Allow grant funds to be used for broadband community engagement and planning activities that involve the business community. Include specific broadband access and adoption deliverables – current selection criteria references the applicant's ability to offer general "technical assistance in Rural areas" but could be focused on broadband technology. Specifically include digital skills training for businesses and communities among possible uses of the funds.
	Feasibility studies, business startup or expansion costs, business incubators, revolving loan funds and community facilities. Included technical assistance to rural businesses and residents.	To conduct feasibility studies, business plans, and applied research as well as provide training and other technical assistance to new and existing cooperatives and businesses.
	Electric and telephone utilities eligible for financing from the Rural Utilities Service.	Non-profit corporations and institutions of higher education.
of 20,000 or less.	Finance economic development and job creation in rural areas. Eligible areas include any area except cities with populations over 50,000 or the adjacent urbanized area.	Establish and operate centers for cooperative development to improve the economic condition in rural areas. Improve operations of existing coops. Eligible areas include any area except cities with populations over 50,000 or the adjacent urbanized area.
	Rural Economic Development Program loans and grants	Rural Cooperative Development Grants (RCDG)

http://www.rd.us da.gov/p rograms- services/ telecom municati ons- infrastru cture- loans- loan- guarante es	
Target program grants and loans to broadband areas of need (Broadband Opportunity Zone), particularly in areas where access is lagging. Specifically allow project costs to include community engagement activities focusing on adoption and use of new facilities.	Target program grants and loans to broadband areas of need (Broadband Opportunity Zone), particularly in areas where access and use of broadband by libraries and museums are lagging. Include digital skill training and community engagement as specific objectives for Leadership Grants.
To finance broadband capable telecommunications service including: improvements, expansions, construction, acquisitions (in certain cases), and refinancing (in certain cases).	For National Leadership Grants for Libraries in 2015, IMLS solicited applications for library projects that advance the National Digital Platform of library services and creation of learner spaces in libraries. Includes research, planning, and project grants in amounts ranging from \$10,000 to \$2,000,000. Tribal library enhancement grants up to \$150,000 support a wide range of library activities, including digital and information literacy training and developing publicprivate partnerships with agencies and community programs. National Leadership Grants for Museums provide grants between \$50,000 and \$500,000. Objectives include projects that will enhance learning experiences, community engagement, and collections
Most entities that provide telecommunication is in qualified rural areas including state and local governmental entities; federally recognized Tribes; non-profits, including Cooperatives, forprofit businesses	Public or nonprofit public library, library agency, library consortium, or library association. Public or non-profit museum; Tribal organizations.
Provides financing for the construction, maintenance, improvement and expansion of telephone service and broadband in rural areas. Eligible areas include rural areas with populations of 5,000 or less; areas without telecommunications facilities or where the applicant is the recognized telecom provider.	Projects that have potential to advance practice in library field, such as generating new tools, research findings, models, services or practices.
Telecommu nications Infrastructur e Loans and Loan Guarantees	Institute of Museum and Library Services National Leadership Grants for Libraries, Museums, and Tribal Organizatio ns Library Enhanceme nt Grants

Transporta- tion	DOT program to fund capital investments in	State, local, and tribal	To build and repair critical pieces of freight and passenger	Target program grants and loans to broadband areas of need (Broadband Opportunity Zone).	http://w ww.trans
Innovation	surface transportation	governments,	transportation networks.		portation
Generating	infrastructure	including U.S.		Require successful applicants to apply Dig Once, open	.gov/tige
Economic		territories, transit		trenching, and pre-clear broadband rights-of-way	<u>-1</u>
Recovery		agencies, port		requests as part of project.	
(TIGER)		authorities,			
Competitive		metropolitan		Provide for planning of projects including feasibility	
Grants		planning		studies as well as investigation on which technologies	
		organizations		to employ.	
		(MPOs), and other			
		political			
		subdivisions of			
		state or local			
		governments			